

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/538,198
Source: PCG
Date Processed by STIC: 2/16/06

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PCT

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/538,198

DATE: 02/16/2006

TIME: 13:05:21

Input Set : A:\2005-12-23 0933-0247PUS1.ST25.txt

Output Set: N:\CRF4\02162006\J538198.raw

3 <110> APPLICANT: SALONEN, Jukka T.
 4 PIRSKANEN, Mia
 5 TUOMAINEN, Tomi-Pekka
 6 YUNUS, Faisel
 8 <120> TITLE OF INVENTION: METHOD AND KIT FOR DETECTING A RISK OF DIABETES OR A
 METABOLIC SYNDROME
 10 <130> FILE REFERENCE: 0933-0247PUS1
 12 <140> CURRENT APPLICATION NUMBER: US 10/538,198
 13 <141> CURRENT FILING DATE: 2005-06-09
 15 <150> PRIOR APPLICATION NUMBER: PCT/FI03/00946
 16 <151> PRIOR FILING DATE: 2003-12-11
 18 <150> PRIOR APPLICATION NUMBER: FI 20022178
 19 <151> PRIOR FILING DATE: 2002-12-11
 21 <160> NUMBER OF SEQ ID NOS: 6
 23 <170> SOFTWARE: PatentIn version 3.1
 25 <210> SEQ ID NO: 1
 26 <211> LENGTH: 1344
 27 <212> TYPE: DNA
 28 <213> ORGANISM: Homo sapiens
 30 <220> FEATURE:
 31 <221> NAME/KEY: CDS
 32 <222> LOCATION: (1)..(1341)
 33 <223> OTHER INFORMATION: ADRA2B variant type sequence
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 37 Met Asp His Gln Asp Pro Tyr Ser Val Gln Ala Thr Ala Ala Ile Ala
 38 1 5 10 15
 40 gcg gcc atc acc ttc ctc att ctc ttt acc atc ttc ggc aac gct ctg 96
 41 Ala Ala Ile Thr Phe Leu Ile Leu Phe Thr Ile Phe Gly Asn Ala Leu
 42 20 25 30
 44 gtc atc ctg gct gtg ttg acc agc cgc tcg ctg cgc gcc cct cag aac 144
 45 Val Ile Leu Ala Val Leu Thr Ser Arg Ser Leu Arg Ala Pro Gln Asn
 46 35 40 45
 48 ctg ttc ctg gtg tcg ctg gcc gcc gac atc ctg gtg gcc acg ctc 192
 49 Leu Phe Leu Val Ser Leu Ala Ala Asp Ile Leu Val Ala Thr Leu
 50 50 55 60
 52 atc atc cct ttc tcg ctg gcc aac gag ctg ctg ggc tac tgg tac ttc 240
 53 Ile Ile Pro Phe Ser Leu Ala Asn Glu Leu Leu Gly Tyr Trp Tyr Phe
 54 65 70 75 80
 56 cgg cgc acg tgg tgc gag gtg tac ctg ggc ctc gac gtg ctc ttc tgc 288
 57 Arg Arg Thr Trp Cys Glu Val Tyr Leu Ala Leu Asp Val Leu Phe Cys
 58 85 90 95
 60 acc tcg tcc atc gtg cac ctg tgc gcc atc agc ctg gac cgc tac tgg 336
 61 Thr Ser Ser Ile Val His Leu Cys Ala Ile Ser Leu Asp Arg Tyr Trp

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| 62 | 100 | 105 | 110 | | | | | | | | | | | | | | | |
| 64 | gcc | gtg | agc | cgc | gca | ctg | gag | tac | aac | tcc | aag | cgc | acc | ccg | cgc | cgc | 384 | |
| 65 | Ala | Val | Ser | Arg | Ala | Leu | Glu | Tyr | Asn | Ser | Lys | Arg | Thr | Pro | Arg | Arg | | |
| 66 | 115 | | | | 120 | | | | | 125 | | | | | | | | |
| 68 | atc | aag | tgc | atc | atc | ctc | act | gtg | tgg | ctc | atc | gcc | gcc | gtc | atc | tcg | 432 | |
| 69 | Ile | Lys | Cys | Ile | Ile | Leu | Thr | Val | Trp | Leu | Ile | Ala | Ala | Val | Ile | Ser | | |
| 70 | 130 | | | | 135 | | | | | 140 | | | | | | | | |
| 72 | ctg | ccg | ccc | ctc | atc | tac | aag | ggc | gac | cag | ggc | ccc | cag | ccg | cgc | ggg | 480 | |
| 73 | Leu | Pro | Pro | Leu | Ile | Tyr | Lys | Gly | Asp | Gln | Gly | Pro | Gln | Pro | Arg | Gly | | |
| 74 | 145 | | | | 150 | | | | | 155 | | | 160 | | | | | |
| 76 | cgc | ccc | cag | tgc | aag | ctc | aac | cag | gag | gcc | tgg | tac | atc | ctg | gcc | tcc | 528 | |
| 77 | Arg | Pro | Gln | Cys | Lys | Leu | Asn | Gln | Glu | Ala | Trp | Tyr | Ile | Leu | Ala | Ser | | |
| 78 | 165 | | | | 170 | | | | | 175 | | | | | | | | |
| 80 | agc | atc | gga | tct | ttc | ttt | gct | cct | tgc | ctc | atc | atg | atc | ctt | gtc | tac | 576 | |
| 81 | Ser | Ile | Gly | Ser | Phe | Phe | Ala | Pro | Cys | Leu | Ile | Met | Ile | Leu | Val | Tyr | | |
| 82 | 180 | | | | 185 | | | | | 190 | | | | | | | | |
| 84 | ctg | cgc | atc | tac | ctg | atc | gcc | aaa | cgc | agc | aac | cgc | aga | ggt | ccc | agg | 624 | |
| 85 | Leu | Arg | Ile | Tyr | Leu | Ile | Ala | Lys | Arg | Ser | Asn | Arg | Arg | Gly | Pro | Arg | | |
| 86 | 195 | | | | 200 | | | | | 205 | | | | | | | | |
| 88 | gcc | aag | ggg | ggg | cct | ggg | cag | ggt | gag | tcc | aag | cag | ccc | cga | ccc | gac | 672 | |
| 89 | Ala | Lys | Gly | Gly | Pro | Gly | Gln | Gly | Glu | Ser | Lys | Gln | Pro | Arg | Pro | Asp | | |
| 90 | 210 | | | | 215 | | | | | 220 | | | | | | | | |
| 92 | cat | ggg | ggt | ggg | gct | ttg | gcc | tca | gcc | aaa | ctg | cca | gcc | ctg | gcc | tct | gtg | 720 |
| 93 | His | Gly | Gly | Ala | Leu | Ala | Ser | Ala | Lys | Leu | Pro | Ala | Leu | Ala | Ser | Val | | |
| 94 | 225 | | | | 230 | | | | | 235 | | | 240 | | | | | |
| 96 | gct | tct | gcc | aga | gag | gtc | aac | gga | cac | tgc | aag | tcc | act | ggg | gag | aag | 768 | |
| 97 | Ala | Ser | Ala | Arg | Glu | Val | Asn | Gly | His | Ser | Lys | Ser | Thr | Gly | Glu | Lys | | |
| 98 | 245 | | | | 250 | | | | | 255 | | | | | | | | |
| 100 | gag | gag | ggg | gag | acc | cct | gaa | gat | act | ggg | acc | cgg | gcc | ttg | cca | ccc | 816 | |
| 101 | Glu | Glu | Gly | Glu | Thr | Pro | Glu | Asp | Thr | Gly | Thr | Arg | Ala | Leu | Pro | Pro | | |
| 102 | 260 | | | | 265 | | | | | 270 | | | | | | | | |
| 104 | agt | tgg | gct | gcc | ctt | ccc | aac | tca | ggc | cag | ggc | cag | aag | gag | ggt | gtt | 864 | |
| 105 | Ser | Trp | Ala | Ala | Leu | Pro | Asn | Ser | Gly | Gln | Gly | Gln | Lys | Glu | Gly | Val | | |
| 106 | 275 | | | | 280 | | | | | 285 | | | | | | | | |
| 108 | tgt | ggg | gca | tct | cca | gag | gat | gaa | gct | gaa | gag | gag | gaa | gag | gag | gag | 912 | |
| 109 | Cys | Gly | Ala | Ser | Pro | Glu | Asp | Glu | Ala | Glu | | |
| 110 | 290 | | | | 295 | | | | | 300 | | | | | | | | |
| 112 | gag | gag | tgt | gaa | ccc | cag | gca | gtg | cca | gtg | tct | ccg | gcc | tca | gct | tgc | 960 | |
| 113 | Glu | Glu | Cys | Glu | Pro | Gln | Ala | Val | Pro | Val | Ser | Pro | Ala | Ser | Ala | Cys | | |
| 114 | 305 | | | | 310 | | | | | 315 | | | 320 | | | | | |
| 116 | agc | ccc | ccg | ctg | cag | cag | cca | cag | ggc | tcc | ccg | gtg | ctg | gcc | acc | cta | 1008 | |
| 117 | Ser | Pro | Pro | Leu | Gln | Gln | Pro | Gln | Gly | Ser | Arg | Val | Leu | Ala | Thr | Leu | | |
| 118 | 325 | | | | 330 | | | | | 335 | | | | | | | | |
| 120 | cgt | ggc | cag | gtg | ctc | ctg | ggc | agg | ggc | gtg | ggt | gct | ata | ggt | ggg | cag | 1056 | |
| 121 | Arg | Gly | Gln | Val | Leu | Leu | Gly | Arg | Gly | Val | Gly | Ala | Ile | Gly | Gly | Gln | | |
| 122 | 340 | | | | 345 | | | | | 350 | | | | | | | | |
| 124 | tgg | tgg | cgt | cga | agg | gca | cac | gtg | acc | ccg | gag | aag | cgc | ttc | acc | ttc | 1104 | |
| 125 | Trp | Trp | Arg | Arg | Arg | Ala | His | Val | Thr | Arg | Glu | Lys | Arg | Phe | Thr | Phe | | |
| 126 | 355 | | | | 360 | | | | | 365 | | | | | | | | |

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| 129 | Val | Leu | Ala | Val | Val | Ile | Gly | Val | Phe | Val | Leu | Cys | Trp | Phe | Pro | Phe | |
| 130 | 370 | | | | | | 375 | | | | 380 | | | | | | |
| 132 | ttc | ttc | agc | tac | agc | ctg | ggc | gcc | atc | tgc | ccg | aag | cac | tgc | aag | gtg | 1200 |
| 133 | Phe | Phe | Ser | Tyr | Ser | Leu | Gly | Ala | Ile | Cys | Pro | Lys | His | Cys | Lys | Val | |
| 134 | 385 | | | | | | 390 | | | 395 | | | 400 | | | | |
| 136 | ccc | cat | ggc | ctc | ttc | cag | ttc | ttc | tgg | atc | ggc | tac | tgc | aac | agc | 1248 | |
| 137 | Pro | His | Gly | Leu | Phe | Gln | Phe | Phe | Trp | Ile | Gly | Tyr | Cys | Asn | Ser | | |
| 138 | | | | | | | 405 | | | 410 | | | 415 | | | | |
| 140 | tca | ctg | aac | cct | gtt | atc | tac | acc | atc | ttc | aac | cag | gac | ttc | cgc | cgt | 1296 |
| 141 | Ser | Leu | Asn | Pro | Val | Ile | Tyr | Thr | Ile | Phe | Asn | Gln | Asp | Phe | Arg | Arg | |
| 142 | | | | | | | 420 | | | 425 | | | 430 | | | | |
| 144 | gcc | ttc | cgg | agg | atc | ctg | tgc | cgc | ccg | tgg | acc | cag | acg | gcc | tgg | tga | 1344 |
| 145 | Ala | Phe | Arg | Arg | Ile | Leu | Cys | Arg | Pro | Trp | Thr | Gln | Thr | Ala | Trp | | |
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| 157 | 1 | | | | | 5 | | | | 10 | | | | 15 | | | |
| 160 | Ala | Ala | Ile | Thr | Phe | Leu | Ile | Leu | Phe | Thr | Ile | Phe | Gly | Asn | Ala | Leu | |
| 161 | | | | | | 20 | | | | 25 | | | 30 | | | | |
| 164 | Val | Ile | Leu | Ala | Val | Leu | Thr | Ser | Arg | Ser | Leu | Arg | Ala | Pro | Gln | Asn | |
| 165 | | | | | | 35 | | | 40 | | | 45 | | | | | |
| 168 | Leu | Phe | Leu | Val | Ser | Leu | Ala | Ala | Ala | Asp | Ile | Leu | Val | Ala | Thr | Leu | |
| 169 | | | | | | 50 | | | 55 | | | 60 | | | | | |
| 172 | Ile | Ile | Pro | Phe | Ser | Leu | Ala | Asn | Glu | Leu | Leu | Gly | Tyr | Trp | Tyr | Phe | |
| 173 | | | | | | 65 | | | 70 | | | 75 | | | 80 | | |
| 176 | Arg | Arg | Thr | Trp | Cys | Glu | Val | Tyr | Leu | Ala | Leu | Asp | Val | Leu | Phe | Cys | |
| 177 | | | | | | 85 | | | 90 | | | 95 | | | | | |
| 180 | Thr | Ser | Ser | Ile | Val | His | Leu | Cys | Ala | Ile | Ser | Leu | Asp | Arg | Tyr | Trp | |
| 181 | | | | | | 100 | | | 105 | | | 110 | | | | | |
| 184 | Ala | Val | Ser | Arg | Ala | Leu | Glu | Tyr | Asn | Ser | Lys | Arg | Thr | Pro | Arg | Arg | |
| 185 | | | | | | 115 | | | 120 | | | 125 | | | | | |
| 188 | Ile | Lys | Cys | Ile | Ile | Leu | Thr | Val | Trp | Leu | Ile | Ala | Ala | Val | Ile | Ser | |
| 189 | | | | | | 130 | | | 135 | | | 140 | | | | | |
| 192 | Leu | Pro | Pro | Leu | Ile | Tyr | Lys | Gly | Asp | Gln | Gly | Pro | Gln | Pro | Arg | Gly | |
| 193 | | | | | | 145 | | | 150 | | | 155 | | | 160 | | |
| 196 | Arg | Pro | Gln | Cys | Lys | Leu | Asn | Gln | Glu | Ala | Trp | Tyr | Ile | Leu | Ala | Ser | |
| 197 | | | | | | 165 | | | 170 | | | 175 | | | | | |
| 200 | Ser | Ile | Gly | Ser | Phe | Phe | Ala | Pro | Cys | Leu | Ile | Met | Ile | Leu | Val | Tyr | |
| 201 | | | | | | 180 | | | 185 | | | 190 | | | | | |
| 204 | Leu | Arg | Ile | Tyr | Leu | Ile | Ala | Lys | Arg | Ser | Asn | Arg | Arg | Gly | Pro | Arg | |
| 205 | | | | | | 195 | | | 200 | | | 205 | | | | | |
| 208 | Ala | Lys | Gly | Gly | Pro | Gly | Gln | Gly | Glu | Ser | Lys | Gln | Pro | Arg | Pro | Asp | |
| 209 | | | | | | 210 | | | 215 | | | 220 | | | | | |
| 212 | His | Gly | Gly | Ala | Leu | Ala | Ser | Ala | Lys | Leu | Pro | Ala | Leu | Ala | Ser | Val | |

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| 213 | 225 | 230 | 235 | 240 |
| 216 | Ala Ser Ala Arg | Glu Val Asn Gly His Ser Lys Ser Thr Gly Glu Lys | | |
| 217 | | 245 | 250 | 255 |
| 220 | Glu Glu Gly Glu | Thr Pro Glu Asp Thr Gly Thr Arg Ala Leu Pro Pro | | |
| 221 | | 260 | 265 | 270 |
| 224 | Ser Trp Ala Ala Leu Pro Asn Ser Gly Gln Gly Gln Lys | Glu Gly Val | | |
| 225 | | 275 | 280 | 285 |
| 228 | Cys Gly Ala Ser Pro Glu Asp | Glu Ala Glu Glu Glu Glu Glu Glu | | |
| 229 | | 290 | 295 | 300 |
| 232 | Glu Glu Cys Glu Pro Gln Ala Val Pro Val Ser Pro Ala Ser Ala Cys | | | |
| 233 | | 305 | 310 | 315 |
| 236 | Ser Pro Pro Leu Gln Gln Pro Gln Gly Ser Arg Val Leu Ala Thr Leu | | | |
| 237 | | 325 | 330 | 335 |
| 240 | Arg Gly Gln Val Leu Leu Gly Arg Gly Val Gly Ala Ile Gly Gly Gln | | | |
| 241 | | 340 | 345 | 350 |
| 244 | Trp Trp Arg Arg Arg Ala His Val Thr Arg Glu Lys Arg Phe Thr Phe | | | |
| 245 | | 355 | 360 | 365 |
| 248 | Val Leu Ala Val Val Ile Gly Val Phe Val Leu Cys Trp Phe Pro Phe | | | |
| 249 | | 370 | 375 | 380 |
| 252 | Phe Phe Ser Tyr Ser Leu Gly Ala Ile Cys Pro Lys His Cys Lys Val | | | |
| 253 | | 385 | 390 | 395 |
| 256 | Pro His Gly Leu Phe Gln Phe Phe Trp Ile Gly Tyr Cys Asn Ser | | | |
| 257 | | 405 | 410 | 415 |
| 260 | Ser Leu Asn Pro Val Ile Tyr Thr Ile Phe Asn Gln Asp Phe Arg Arg | | | |
| 261 | | 420 | 425 | 430 |
| 264 | Ala Phe Arg Arg Ile Leu Cys Arg Pro Trp Thr Gln Thr Ala Trp | | | |
| 265 | | 435 | 440 | 445 |
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| 270 | <212> TYPE: DNA | | | |
| 271 | <213> ORGANISM: Homo sapiens | | | |
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| 274 | <221> NAME/KEY: CDS | | | |
| 275 | <222> LOCATION: (1)..(1350) | | | |
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| 280 | Met Asp His Gln Asp Pro Tyr Ser Val Gln Ala Thr Ala Ala Ile Ala | | | |
| 281 | | 1 | 5 | 10 |
| | | | | 15 |
| 283 | gcg gcc atc acc ttc ctc att ctc ttt acc atc ttc ggc aac gct ctg | | | 96 |
| 284 | Ala Ala Ile Thr Phe Leu Ile Leu Phe Thr Ile Phe Gly Asn Ala Leu | | | |
| 285 | | 20 | 25 | 30 |
| 287 | gtc atc ctg gct gtg ttg acc agc cgc tcg ctg cgc gcc cct cag aac | | | 144 |
| 288 | Val Ile Leu Ala Val Leu Thr Ser Arg Ser Leu Arg Ala Pro Gln Asn | | | |
| 289 | | 35 | 40 | 45 |
| 291 | ctg ttc ctg gtg tcg ctg gcc gcc gac atc ctg gtg gcc acg ctc | | | 192 |
| 292 | Leu Phe Leu Val Ser Leu Ala Ala Asp Ile Leu Val Ala Thr Leu | | | |
| 293 | | 50 | 55 | 60 |
| 295 | atc atc cct ttc tcg ctg gcc aac gag ctg ctg ggc tac tgg tac ttc | | | 240 |

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|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| 296 | Ile | Ile | Pro | Phe | Ser | Leu | Ala | Asn | Glu | Leu | Leu | Gly | Tyr | Trp | Tyr | Phe | |
| 297 | 65 | | | 70 | | | | | 75 | | | | 80 | | | | |
| 299 | cgg | cgc | acg | tgg | tgc | gag | gtg | tac | ctg | gcg | ctc | gac | gtg | ctc | tgc | 288 | |
| 300 | Arg | Arg | Thr | Trp | Cys | Glu | Val | Tyr | Leu | Ala | Leu | Asp | Val | Leu | Phe | Cys | |
| 301 | | | | | | | | | 85 | | 90 | | 95 | | | | |
| 303 | acc | tcg | tcc | atc | gtg | cac | ctg | tgc | gcc | atc | agc | ctg | gac | cgc | tac | tgg | |
| 304 | Thr | Ser | Ser | Ile | Val | His | Leu | Cys | Ala | Ile | Ser | Leu | Asp | Arg | Tyr | Trp | |
| 305 | | | | | | | | | 100 | | 105 | | 110 | | | | |
| 307 | gcc | gtg | agc | cgc | gcg | ctg | gag | tac | aac | tcc | aag | cgc | acc | ccg | cgc | 384 | |
| 308 | Ala | Val | Ser | Arg | Ala | Leu | Glu | Tyr | Asn | Ser | Lys | Arg | Thr | Pro | Arg | Arg | |
| 309 | | | | | | | | | 115 | | 120 | | 125 | | | | |
| 311 | atc | aag | tgc | atc | atc | ctc | act | gtg | tgg | ctc | atc | gcc | gcc | gtc | atc | tgc | |
| 312 | Ile | Lys | Cys | Ile | Ile | Leu | Thr | Val | Trp | Leu | Ile | Ala | Ala | Val | Ile | Ser | |
| 313 | | | | | | | | | 130 | | 135 | | 140 | | | | |
| 315 | ctg | ccg | ccc | ctc | atc | tac | aag | ggc | gac | cag | ggc | ccc | cag | ccg | cgc | 480 | |
| 316 | Leu | Pro | Pro | Leu | Ile | Tyr | Lys | Gly | Asp | Gln | Gly | Pro | Gln | Pro | Arg | Gly | |
| 317 | | | | | | | | | 145 | | 150 | | 155 | | 160 | | |
| 319 | cgc | ccc | cag | tgc | aag | ctc | aac | cag | gag | gcc | tgg | tac | atc | ctg | gcc | 528 | |
| 320 | Arg | Pro | Gln | Cys | Lys | Leu | Asn | Gln | Glu | Ala | Trp | Tyr | Ile | Leu | Ala | Ser | |
| 321 | | | | | | | | | 165 | | 170 | | 175 | | | | |
| 323 | agc | atc | gga | tct | ttc | ttt | gct | cct | tgc | ctc | atc | atg | atc | ctt | gtc | 576 | |
| 324 | Ser | Ile | Gly | Ser | Phe | Phe | Ala | Pro | Cys | Leu | Ile | Met | Ile | Leu | Val | Tyr | |
| 325 | | | | | | | | | 180 | | 185 | | 190 | | | | |
| 327 | ctg | cgc | atc | tac | ctg | atc | gcc | aaa | cgc | agc | aac | cgc | aga | ggt | ccc | agg | |
| 328 | Leu | Arg | Ile | Tyr | Leu | Ile | Ala | Lys | Arg | Ser | Asn | Arg | Arg | Gly | Pro | Arg | |
| 329 | | | | | | | | | 195 | | 200 | | 205 | | | | |
| 331 | gcc | aag | ggg | ggg | cct | ggg | cag | ggg | gag | tcc | aag | cag | ccc | cga | ccc | 672 | |
| 332 | Ala | Lys | Gly | Gly | Pro | Gly | Gln | Gly | Glu | Ser | Lys | Gln | Pro | Arg | Pro | Asp | |
| 333 | | | | | | | | | 210 | | 215 | | 220 | | | | |
| 335 | cat | ggg | ggt | ggt | gcc | tcc | aaa | ctg | cca | gcc | ctg | gcc | tct | gtg | | 720 | |
| 336 | His | Gly | Gly | Ala | Leu | Ala | Ser | Ala | Lys | Leu | Pro | Ala | Leu | Ala | Ser | Val | |
| 337 | | | | | | | | | 225 | | 230 | | 235 | | 240 | | |
| 339 | gct | tct | gcc | aga | gag | gtc | aac | gga | cac | tcg | aag | tcc | act | ggg | gag | 768 | |
| 340 | Ala | Ser | Ala | Arg | Glu | Val | Asn | Gly | His | Ser | Lys | Ser | Thr | Gly | Glu | Lys | |
| 341 | | | | | | | | | 245 | | 250 | | 255 | | | | |
| 343 | gag | gag | ggg | gag | acc | cct | gaa | gat | act | ggg | acc | cgg | gcc | ttg | cca | ccc | |
| 344 | Glu | Glu | Gly | Glu | Thr | Pro | Glu | Asp | Thr | Gly | Thr | Arg | Ala | Leu | Pro | Pro | |
| 345 | | | | | | | | | 260 | | 265 | | 270 | | | | |
| 347 | agt | tgg | gct | gcc | ctt | ccc | aac | tca | ggc | cag | ggc | cag | aag | gag | ggt | 864 | |
| 348 | Ser | Trp | Ala | Ala | Leu | Pro | Asn | Ser | Gly | Gln | Gly | Gln | Lys | Glu | Gly | Val | |
| 349 | | | | | | | | | 275 | | 280 | | 285 | | | | |
| 351 | tgt | ggg | gca | tct | cca | gag | gat | gaa | gct | gaa | gag | gag | gaa | gag | gag | 912 | |
| 352 | Cys | Gly | Ala | Ser | Pro | Glu | Asp | Glu | Ala | Glu | Glu | Glu | Glu | Glu | Glu | | |
| 353 | | | | | | | | | 290 | | 295 | | 300 | | | | |
| 355 | gag | gag | gag | gag | tgt | gaa | ccc | cag | gca | gtg | cca | gtg | tct | ccg | gcc | 960 | |
| 356 | Glu | Glu | Glu | Glu | Cys | Glu | Pro | Gln | Ala | Val | Pro | Val | Ser | Pro | Ala | | |
| 357 | | | | | | | | | 305 | | 310 | | 315 | | 320 | | |
| 359 | tca | gct | tgc | agc | ccc | ccg | ctg | cag | cag | cca | cag | ggc | tcc | ccg | gtg | ctg | 1008 |
| 360 | Ser | Ala | Cys | Ser | Pro | Pro | Leu | Gln | Gln | Pro | Gln | Gly | Ser | Arg | Val | Leu | |

VERIFICATION SUMMARY
PATENT APPLICATION: US/10/538,198

DATE: 02/16/2006
TIME: 13:05:22

Input Set : A:\2005-12-23 0933-0247PUS1.ST25.txt
Output Set: N:\CRF4\02162006\J538198.raw